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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/710,593

07/22/2004

James Lee Uecker

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4592

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7590

07/26/2007

ZIOLKOWSKI PATENT SOLUTIONS GROUP, SC (ITW)

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PORT WASHINGTON, WI 53074

EXAMINER

SHAW, CLIFFORD C

ART UNIT

PAPER NUMBER

1725

MAIL DATE

DELIVERY MODE

07/26/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/710,593

Applicant(s)

UECKER ET AL.

Examiner

Clifford C. Shaw

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1725

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 May 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9-24 is/are allowed.
- 6) ☒ Claim(s) 1-8 and 25-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

Detailed Action

1.) The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2.) Claims 25-28 are rejected under 35 U.S.C. 102(b) as being anticipated by Hackman et al. (2,806,127). The patent to Hackman et al. (2,806,127) discloses a welding system with the features claimed, including: power source 24; wire feeder associated with 16; means 38 for controlling a filler material delivery rate including a reduced rate prior to arc stabilization; detecting means 40 to detect the presence of an arc (this necessarily includes detecting arc initiation and detecting an arc when it is stable). In regard to claim 28, note that the “weld speed adjustment 42 in the Hackman et al. patent adjusts the wire feed speed for the main part of the welding operation, which is necessarily “after welding arc stabilization” as called for in the claim.

3.) Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hackman et al. (2,806,127). Figures 1 and 2 and the discussion at columns 3-5 of the patent to Hackman et al. (2,806,127) disclose a method with steps claimed, including: initiating wire feed speed by activating motor 16; alternatively, the claimed step of “initiating wire feed speed” reads on the step of initially determining and setting wire feed speed at element 42; temporarily reducing wire feed speed as determined by the “inching speed adjustment” 36; and adjusting wire feed speed based on the “weld speed adjustment” 42. The claims differ in calling for a reduction of wire

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feed speed for a duration based on detecting the arc and on the user selected speed and in calling for specific time periods in dependent claims 3 and 6. These differences do not patentably distinguish over the prior art. The graph in figure 2 of the patent to Hackman et al. (2,806,127) shows how wire feed speed ramps up from a set inch rate to the user selected speed after an arc is detected at time "E". During this period of time, the wire feed speed is "reduced" from its final weld speed. It is considered obvious that the duration of time between "E" and the full user-set welding wire feed rate will be a function of the value of the feed rate because it will clearly take a longer period of time to accelerate to a higher set speed and a shorter period of time to accelerate to a lower set speed. In regard to claims 3 and 6, it is considered obvious that the inching speed and weld speed in Hackman et al could have been adjusted to correspond to the time periods claimed, in order to adjust the system for a particular welding situation.

4.) Claims 9-24 are allowable over the prior art of record. None of the prior art of record teaches or suggests a method of establishing a welding arc with all of the combined steps of independent claim 9, particularly the step of reducing the wire feed speed below the initial run-in speed as set forth in the claim. None of the prior art of record teaches or suggests a welding system with all of the combined features of independent claim 15, particularly the limitations associated with the acceleration and speed functions executed by the controller in the manner set forth in the claim. Dependent claims 9-14 and 16-24 are allowable at least because they depend from independent claims 9 and 15.

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5.) Applicant's arguments filed 5/7/2007 have been fully considered but they are not persuasive. Claims 9-24 have been allowed. Applicant's arguments concerning claims 1-8 and 25-28 are not persuasive of patentability. Claims 1 and 25 and the claims dependent thereon are broad enough to be obvious over or anticipated by the setting of an inching speed and the build up to a wire feed speed for welding as taught in Hackman et al., as discussed above.

6.) **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.


Any inquiry concerning this communication should be directed to Clifford C Shaw at telephone number 571-272-1182. The examiner can normally be reached on Monday through

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Friday of the first week of the pay period and on Tuesday through Friday of the second week of the pay period.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Patrick J. Ryan, can be reached at 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Clifford C Shaw
Primary Examiner
Art Unit 1725

July 20, 2007